

TRANSMITTAL OF APPEAL BRIEF (Large Entity)

#8 \$AF
2402
Docket No.
INTL-0489-US

In Re Application Of: **WERNER METZ**

Serial No.
09/836,978

Filing Date
April 18, 2001

Examiner
Srilakshmi K. Kumar

Group Art Unit
2675

Invention: **LOCATING A POSITION ON A DISPLAY SCREEN**

RECEIVED

SEP 25 2003

Technology Center 2600

TO THE COMMISSIONER FOR PATENTS:

Transmitted herewith in triplicate is the Appeal Brief in this application, with respect to the Notice of Appeal filed on

The fee for filing this Appeal Brief is: **\$320.00**

- ☒ A check in the amount of the fee is enclosed.
- ☐ The Director has already been authorized to charge fees in this application to a Deposit Account.
- ☒ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. **20-1504**


Signature

Dated: September 17, 2003


Mark J. Rozman, Reg. No. 42,117
TROP, PRUNER & HU, P.C.
8554 Katy Freeway, Suite 100
Houston, TX 77024



21906

PATENT TRADEMARK OFFICE

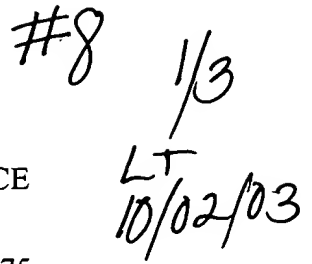
I certify that this document and fee is being deposited on 9/17/2003 with the U.S. Postal Service as first class mail under 37 C.F.R. 1.8 and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.


Signature of Person Mailing Correspondence

Jennifer Juarez

Typed or Printed Name of Person Mailing Correspondence

CC:



LT
10/02/03

~~~~~

Technology Center 2000

Sir:

Applicant respectfully appeals from the final rejection mailed May 7, 2003.

The real party in interest is the assignee Intel Corporation, the assignee of the present application by virtue of the assignment recorded at Reel/Frame 011734/0824.

None.

The application was originally filed with claims 1-30. Claims 1-30 are pending. Claims 1-2, 6-13, 17-23, and 27-30 stand rejected. Claims 3-5, 14-16, and 24-26 are indicated as being objected to as being dependent upon a rejected based claim, but allowable if rewritten in

**320.00 OP**

Jennifer Juarez

independent form. However, it is noted that claims 14-16 stand rejected under 35 U.S.C. §112, second paragraph. Thus, claims 1, 2, 6-23, and 27-30 are the subject of this appeal.

#### IV. STATUS OF AMENDMENTS

Applicant filed an Amendment After Final on May 21, 2003, amending claim 11 in an effort to overcome the §112, second paragraph rejection, and canceling claim 30. However, in an Advisory Action mailed June 26, 2003, the Examiner refused to enter these amendments. Accordingly, claims 1-30 remain pending in the Application.

#### V. SUMMARY OF THE INVENTION

Referring to Figure 1, a sequence of computer display screen frames 10 are shown. In this case, a frame 10 (or a portion of a frame) may be divided geometrically into a plurality of regions 12 through 18.

The frame 10 may be divided into regions 12, 14, 16 and 18, each of which is assigned a particular detectable characteristic such as a color value. In Figure 1, the letter R represents the color red, the letter B represents the color blue, and the letter G represents the color green.

Each of a plurality of regions 12-18 within a frame 10 are assigned a particular detectable characteristic. This characteristic may be a color, a gray scale value or even a non-visual characteristic such as an infrared or near infrared value. A spatial characteristic may be detected to uniquely determine the location of a sensor tuned to detect that characteristic. The detection of the characteristic may be utilized to determine the position of a sensor such as a light pen. See specification, pp. 3-4.

Thus, referring to Figure 1, in one embodiment, each of the regions 12 through 18 is assigned one of three different characteristic values at three different times. The three characteristic values create a unique sequence distinguishable from the sequences used in other

regions 14-18. For example, at a first instance, shown in the block on the left in Figure 1, the region 12 is assigned a red value, in the next instance the region 12 is assigned a green value and in the last instance, shown in the block on the right, the region 12 is assigned the blue value. Thus, if a light sensor detects the sequence red-green-blue, there can be no doubt that the light sensor is positioned over the region 12.

A unique sequence of three colors may be selectively assigned to each of the four regions 12-18 at three different time periods to create a sequence that uniquely identifies one of four regions 12-18. The region 12 may be associated with the sequence R-G-B, the region 14 may be associated with the sequence G-B-R, the region 16 may be associated with the sequence B-R-G, and the region 18 may be associated with the sequence R-R-B in one embodiment. Thus, while the characteristic, such as a color, of any region may not in itself be unique, a unique time sequence is assigned to each of the regions 12-18 to enable each region to be uniquely identified. A sensor that senses the unique sequence is necessarily situated over the corresponding region 12-18. See specification, pp. 4-5.

Once the location of the sensor is identified with respect to a region 12-18, the corresponding region may then be resolved into a sequence of subregions. Specific characteristics may be assigned to each subregion and a sequence of characteristics to further resolve the location of the sensor within the previously identified subregions. This may be followed by a similar division of the subregion into a subsubregions and so on.

Thus, the position of a sensor on a display screen may be determined with any desired level of granularity. The number of regions is limited only by the ability to resolve different characteristics such as colors, and to create regions of given size, and by the optical sampling size and ability to analyze the sequence of frames.

In accordance with another embodiment of the present invention, shown in Figure 2, a plurality of frames 10a may be subdivided into regions 12a-18a. In this case, a characteristic, such as a color assigned to each region 12a-18a, varies between only two values. The number of frames 10a in a location determining sequence is then increased. As an example, one may assign the sequence R-R-G-R-R to the region 12a, the sequence G-R-R-R-G to the region 14a, the sequence R-G-R-R-G to the region 16a, and the R-R-R-R-G to the region 18a. Thus, each region 12a-18a may have a sequence that is uniquely time coded. See specification, pp. 5-6.

Referring to Figure 3, a system 20 displays images and detects the position of a sensor 42 such as a light pen on a display 11. A processor 22 may be coupled to a bridge 24 in one embodiment. In such an embodiment, the bridge 24 may be coupled to a system memory 26 and a display 11 through a display controller 28. Similarly, in that embodiment, the bridge 24 may be coupled to a bus 30 in turn coupled to another bridge 32. Still continuing with the same embodiment, the bridge 32 may include a storage device 34 that stores a software program 36. The bridge 32 may also be coupled through a bus 38 to a serial input/output (SIO) device 40 in turn coupled to a sensor 42. The sensor 42 may be what is conventionally called a light pen in one embodiment.

Referring to Figure 4, a flow chart for the software 36, in accordance with one embodiment of the present invention, begins by displaying a conventional frame as indicated in block 44. After a conventional frame has been displayed, a position locating frame 10 or 10a of the type shown in Figures 1 and 2 may be interspersed within conventional frames, as indicated in block 46.

A check at diamond 48 determines whether a particular characteristic associated with regions 12-18 or 12a-18a has been detected. The characteristic may be a color, a gray scale

value or some other detectable value associated with a particular region 12-18 or 12a-18a within the position locating frames 10.

When the characteristic has been detected for each region 12-18 or 12a-18a, the characteristic for each region is recorded as indicated in block 50. A check at diamond 52 determines whether the last position locating frame 10, 10a has now been displayed, for example interspersed with conventional frames. If so, the flow ends. See specification, pp. 6-8.

## VI. ISSUES

- A. Are Claims 1, 2, 11-13, 20-23, and 29 Patentable Under 35 U.S.C. § 102(b) Over Benson?**
- B. Are Claims 6, 7, 17 and 27 Patentable Under 35 U.S.C. § 102(b) Over Benson?**
- C. Are Claims 8, 18, and 28 Patentable Under 35 U.S.C. § 102(b) Over Benson?**
- D. Are Claims 9 and 19 Patentable Under 35 U.S.C. § 102(b) Over Benson?**
- E. Is Claim 10 Patentable Under 35 U.S.C. § 102(b) Over Benson?**
- F. Is Claim 30 Patentable Under 35 U.S.C. § 103(a) Over Benson?**
- G. Are Claims 11-19 Patentable Under 35 U.S.C. § 112, Second Paragraph?**

## VII. GROUPING OF THE CLAIMS

For purposes of this appeal, Applicant has grouped together claims 1, 2, 11-13, 20-23 and 29; claims 6, 7, 17 and 27; claims 8, 18, and 28; claims 9 and 19; claim 10; claim 30; and claims 11-19 for purposes of the §112, second paragraph rejection, as set forth above.

## VIII. ARGUMENT

### A. **Claims 1, 2, 11-13, 20-23, and 29 Are Patentable Under 35 U.S.C. § 102(b) Over Benson**

Claims 1 recites a method including resolving a display into at least two regions; generating a different sequence of characteristic values in each region; and resolving the position of a sensor with respect to the regions.

The Examiner rejected claims 1, 2, 11-13, 20-23 and 29 under 35 U.S.C. § 102(b) over U.S. Patent No. 5,650,800 (Benson). This rejection is improper. With regard to claim 1, the Examiner states “Benson discloses in FIG. 5, different regions with different values, such as the teller area, storage, women, window #3, window #4, and where the sensors of each group disclose a unique identification.” Final Office Action, p. 6.

However, Benson does not disclose “generating a different sequence of characteristic values in each region” as recited by claim 1. Instead, the portion of Benson referred to by the Examiner merely states that a sensor icon on a display map may be moved to a general location corresponding to the sensor’s physical location. In this regard, there is no “different sequence of characteristic values” generated in each region of the display of Benson. Instead, as disclosed by Benson a sensor ID cannot be changed. Benson, 5:16-25; 9:22-23. Thus no “different sequence” of characteristic values is generated.

For at least these reasons, claims 1, 2, 11-13, 20-23, and 29 are patentable over Benson and the rejection should be reversed.

### B. **Claims 6, 7, 17 and 27 Are Patentable Under 35 U.S.C. § 102(b) Over Benson**

Claim 6 depends from claim 1 and further recites displaying a series of frame and interspersing, among the frames, additional frames having at least two regions each displaying a sequence of characteristic values. For the same reasons discussed above regarding claim 1,

claim 6 is patentable. Claim 6 is further patentable, as nowhere does Benson disclose “displaying a series of frames and interspersing, among said frames, additional frames having at least two regions each displaying a sequence of characteristic values.” In this regard, the Examiner appears to concede that Benson does not disclose such displaying, but rather that regions of a display “would be able to disclose a different characteristic value...[and] the display could further change....” Final Office Action, p. 6.

Even if this were correct, Benson does not disclose such interspersing additional frames having at least two regions each displaying a sequence of characteristic values. More so, even if the Examiner were correct, such “woulds” or “coulds” are not disclosed in Benson and are not inherent therein, which is apparently what the Examiner contends. To be inherent, a disclosure must necessarily perform in a given manner. The fact that a certain result or characteristic may occur or be present in the prior art is insufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 28 U.S.P.Q.2d 1955, 1957 (Fed. Cir. 1993). “To establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.’” *In re Robertson*, 49 U.S.P.Q.2d 1949, 1950-51 (Fed. Cir. 1999). “In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.” *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis added). The Examiner has not met such a burden. Because the Examiner concedes that, at best, Benson “could” or “would” operate a



certain way, anticipation cannot be established. Thus claims 6, 7, 17 and 27 are patentable over Benson and the rejection should be reversed.

**C. Claims 8, 18, and 28 Are Patentable Under 35 U.S.C. § 102(b) Over Benson**

Claim 8 depends from claim 1 and further recites generating a different sequence of characteristic values by displaying a time sequence of frames each including at least two regions, and each of said regions displaying a timed sequence of characteristic values. For the same reasons discussed above regarding claim 1, claim 8 is patentable. Claim 8 is further patentable, as nowhere does Benson disclose “displaying a time sequence of frames each including at least two regions, and each of said regions displaying a timed sequence of characteristic values.” In this regard, the periodic broadcasting of system status (recited by the Examiner) is not a timed sequence of characteristic values, nor is it characteristic values of regions of a display. Thus claims 8, 18, and 28 are patentable over Benson and the rejection should be reversed.

**D. Claims 9 and 19 Are Patentable Under 35 U.S.C. § 102(b) Over Benson**

Claim 9 depends from claim 8 and further recites interspersing frames containing the characteristic values and frames not containing the characteristic values. In addition to the reasons discussed above regarding claim 8, claim 9 is further patentable as Benson does not disclose such interspersing. In this regard, the scrolling contended by the Examiner merely allows a user to move an identified sensor to a given location using arrow keys. This is not interspersing frames containing and not containing characteristic values. Thus claims 9 and 19 are patentable over Benson and the rejection should be reversed.

**E. Claim 10 Is Patentable Under 35 U.S.C. § 102(b) Over Benson**

Claim 10 depends from claim 1 and further recites developing a sequence using fewer characteristic values than the number of regions. Nowhere does Benson disclose such development of a sequence. As discussed above regarding claim 1 there is no “sequence” generated by Benson, as the sensor ID’s remain fixed. Thus claim 10 is patentable and the rejection should be reversed.

**F. Claim 30 Is Patentable Under 35 U.S.C. § 103(a) Over Benson**

Claim 30 depends from claim 29 and further recites that the sensor is a light sensor. Nowhere does Benson teach or suggest that such sensor be a light sensor. The Examiner contends that it would be obvious to a light sensor because “breaking [a] light beam would ‘trip’ the sensor.” Final Office Action p. 5. However, the claim requires that the light sensor detect a characteristic value. Breaking a light does not teach or suggest detecting a characteristic value. Thus claim 30 is patentable over Benson and the rejection should be reversed.

**G. Claims 11-19 Are Patentable Under 35 U.S.C. § 112, Second Paragraph**

Claims 11-19 stand rejected under 35 U.S.C. §112, second paragraph. The Examiner states it is unclear as to what ‘an article’ is. Final Office Action, page 6. As recited in claim 11, an article is something that stores instructions “that enable a processor-based system” to perform certain actions. As such, claims 11-19 particularly point out and distinctly claim the subject matter of the invention. More so, as described in the specification, in one embodiment a system includes a storage device 34 that stores a software program 36 (see Specification, page 7 and FIG. 3).

The Examiner further states that “nowhere in the specification is it defined in what ‘an article’ is.” Final Office Action, p. 2. Such a definition in the specification is not required:

The mere fact that a term or phrase used in the claim has no antecedent basis in the specification disclosure does not mean, necessarily, that the term or phrase is indefinite. There is no requirement that the words in the claim must match those used in the specification disclosure. Applicants are given a great deal of latitude in how they choose to define their inventions so long that the terms and phrases used define the invention with a reasonable degree of clarity and precision.

MPEP § 2173.05(e). As described immediately above, such clarity and precision is present in claims 11-19, as the claimed article is used to store instructions to enable a processor-based system to perform the claimed elements.

More so, the preamble of claim 11 and claims 12-19 depending therefrom are similar to the claims of U.S. Patent No. 5,710,578 (e.g., claims 7-9). This patent resulted from the appeal of *In re Beauregard*, 53 F.3d 1583, 1584 (Fed. Cir. 1995), in which the Commissioner stated that “computer programs embodied in a tangible medium, such as floppy diskettes” were patentable subject matter.

Further, the Patent Office has recently allowed patents including the identical preamble as claim 11. See U.S. Patent Nos. 6,609,188 and 6,598,085. As patent claims are presumed valid (35 U.S.C. §282), these claims obviously comply with 35 U.S.C. §112, second paragraph.

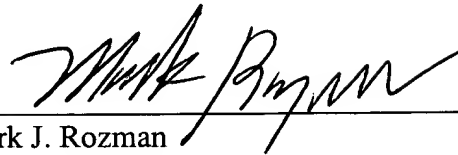
Accordingly, the rejection of claims 11-19 is improper and should be reversed.

## IX. CONCLUSION

Since the rejections of the claims are baseless, they should be reversed.

Respectfully submitted,

Date: September 17, 2003



Mark J. Rozman  
Registration No. 42,117  
8554 Katy Fwy, Ste 100  
Houston, TX 77024-1805  
512/418-9944 [Phone]  
713/468-8883 [Facsimile]



21906

PATENT TRADEMARK OFFICE

## APPENDIX OF CLAIMS

The claims on appeal are:

- 1           1.     A method comprising:  
2                 resolving a display into at least two regions;  
3                 generating a different sequence of characteristic values in each region; and  
4                 resolving the position of a sensor with respect to said regions.
  
- 1           2.     The method of claim 1 wherein resolving a display into at two regions includes  
2 resolving a display into at least four regions.
  
- 1           3.     The method of claim 1 wherein generating a different sequence includes  
2 generating a different sequence of color values in each region.
  
- 1           4.     The method of claim 3 including generating a different sequence of at least three  
2 color values.
  
- 1           5.     The method of claim 3 including generating a different sequence of only two  
2 color values.
  
- 1           6.     The method of claim 1 including displaying a series of frames and interspersing,  
2 among said frames, additional frames having at least two regions each displaying a sequence of  
3 characteristic values.

1           7.       The method of claim 6 including displaying said additional frames in a fashion  
2 such that they are substantially undetectable by the user.

1           8.       The method of claim 1 including generating a different sequence of characteristic  
2 values by displaying a time sequence of frames each including at least two regions, and each of  
3 said regions displaying a timed sequence of characteristic values.

1           9.       The method of claim 8 including interspersing frames containing said  
2 characteristic values and frames not containing said characteristic values.

1           10.      The method of claim 1 including developing a sequence using fewer characteristic  
2 values than the number of regions.

1           11.      An article comprising a medium storing instructions that enable a processor-based  
2 system to:  
3           resolve a display into at least two regions; and  
4           generate a different sequence of characteristic values in each region.

1           12.      The article of claim 11 further storing instructions that enable the processor-based  
2 system to resolve the position of a sensor with respect to said regions.

1           13.      The article of claim 11 further storing instructions that enable the processor-based  
2 system to resolve the display into at least four regions.

1           14.    The article of claim 11 further storing instructions that enable the processor-based  
2 system to generate a different sequence of color values in each region.

1           15.    The article of claim 14 further storing instructions that enable the processor-based  
2 system to generate a different sequence of at least three color values in each region.

1           16.    The article of claim 14 further storing instructions that enable the processor-based  
2 system to generate a different sequence of only two color values in each region.

1           17.    The article of claim 11 further storing instructions that enable the processor-based  
2 system to cause a series of frames to be displayed while interspersing, among said frames,  
3 additional frames having at least two regions each displaying a sequence of characteristic values.

1           18.    The article of claim 11 further storing instructions that enable the processor-based  
2 system to generate a different sequence of characteristic values by displaying a time sequence of  
3 frames each including at least two regions, and each of said regions displaying a time sequence  
4 of characteristic values.

1           19.    The article of claim 18 further storing instructions that enable the processor-based  
2 system to intersperse frames containing said characteristic values and frames not containing said  
3 characteristic values.

1           20.    A system comprising:  
2                   a processor;  
3                   a memory coupled to said processor, said memory storing instructions that enable  
4 the system to resolve a display into at least two regions and generate a different sequence of  
5 characteristic values in each region.

1           21.    The system of claim 20 including a display coupled to said processor.

1           22.    The system of claim 21 wherein said storage stores instructions that enable the  
2 system to resolve the position of a sensor with respect to said regions.

1           23.    The article of claim 20 wherein said storage stores instructions that enable the  
2 system to resolve the display into at least four regions.

1           24.    The system of claim 21 wherein said storage stores instructions that enable the  
2 system to generate a different sequence of color values in each region.

1           25.    The system of claim 24 wherein said storage stores instructions that enable the  
2 system to generate a different sequence of at least three color values in each region.

1           26.    The system of claim 24 wherein said storage stores instructions that enable the  
2 system to generate a different sequence of only two color values in each region.



1           27.     The system of claim 20 wherein said storage stores instructions that enable the  
2     system to cause a series a frames to be displayed while interspersing, among said frames,  
3     additional frames having at least two regions each displaying a sequence of characteristic values.

1           28.     The system of claim 20 wherein said storage stores instructions that enable the  
2     system to generate a different sequence of characteristic values by displaying a time sequence of  
3     frames each including at least two regions, and each of said regions displaying a time sequence  
4     of characteristic values.

1           29.     The system of claim 20 including a sensor coupled to said processor.

1           30.     The system of claim 29 wherein said sensor is a light sensor that detects a  
2     characteristic value in the form of light.